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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,052

12/16/2004

Masayoshi Tatamoto

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EXAMINER

KOLLIAS, ALEXANDER C

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

05/21/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/518,052	Applicant(s) TATEMOTO ET AL.	
	Examiner ALEXANDER C. KOLLIAS	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 1-7, 11-36 and 39-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-10, 37-38 and 51-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. All outstanding claims objections and 35 USC 112, 2nd paragraph rejections are withdrawn in light of applicant's amendment filed on 2/16/2010.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. No new grounds of rejection are set forth below. Thus, the following action is properly made final.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 8, and 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bekiarian et al (US 2004/0167289), Doyle et al (US 6,140,436), Odian (*Principles of Polymerization*, see attached pages of previous Office Action) and Kaulbach et al (US 2004/0072977).

The rejection is adequately set forth in Paragraph 6 of the Office Action mailed on 2/16/2009 and is incorporated here by reference.

6. Claims 9-10 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bekiarian et al (US 2004/0167289), Doyle et al (US 6,140,436) and Odian (*Principles of*

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Polymerization, see attached pages) as applied to claims 8, and 51-56 above, and in view of Grot (US 4,433,082).

The rejection is adequately set forth in Paragraph 8 of the Office Action mailed on 2/16/2009 and is incorporated here by reference.

7. Claims 37, and 57- 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bekiarian et al (US 2004/0167289) in view of Doyle et al (US 6,140,436).

The rejection is adequately set forth in Paragraph 9 of the Office Action mailed on 2/16/2009 and is incorporated here by reference.

Response to Arguments

8. Applicant's arguments filed 2/16/2009 have been fully considered but they are not persuasive.

9. Applicants argue that emulsion polymerization does not produce spherical fluoropolymer particles. As evidence of their position Applicants compare Example 5 of the present invention to Example 1B of US Patent 7,482,415 in the Declaration under 37 C.F.R. 1.132 filed on 8/21/2009. However, it is significant to note that in the previous Office Action, US 7,482,415 was not utilized to reject the present claims. Instead, Berkiarian in combination with Doyle and Odian was utilized against the present claims. While Example 1B of US '415 does not produce spherical fluoropolymer particles, the Declaration does not disclose fluoropolymer particles produced by the closest prior art of record. US '415 discloses polymerization steps which are not

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disclosed in the polymerization process disclosed by Berkiarian et al. Significant differences in fluoropolymer polymerization processes disclosed by US '415 and Berkiarian et al include the use of the fluorosurfactant ammonium perfluorooctanoate in the Berkiarian reference. The compound, ammonium perfluorooctanoate, is a surfactant utilized in emulsion polymerization. Evidence supporting the Examiner's position is found on Page 3 [0024]-[0026] of Kaulbach et al (US 2004/0072977) which discloses fluorinated surfactants such as ammonium salts of perfluorooctanoic acid that are utilized as surfactants in aqueous emulsion polymerization processes. Further, as evidenced by Odian, emulsion polymerization results in spherical polymer particles. Thus, given the evidence in Kaulbach and Odian, and given that Berkiarian discloses a process of polymerizing PSEPVE and VF2 utilizing water and fluorosurfactant, the Examiner's position remains that the process disclosed by Berkiarian is not only drawn to emulsion polymerization but also results spherical fluoropolymer particles.

Further it is noted that Page 9, Lines 30-35, Page 13, Lines 2-6 and Page 27 Lines 19-32 of the present Specification disclose that fluoropolymer solid compositions comprising spherical fluoropolymer fine particles can be prepared from a dispersion obtain by emulsion polymerization. Given that the prior art of record also teaches emulsion polymerization, it is not clear in light of Applicant's own admission why Applicants are arguing that Berkiarian does not teach spherical particles.

10. Applicants argue that none of the references disclose that the fluoropolymer dispersion is produced without drying. However, it is noted that as set forth in the previous Office Action while Berkiarian does not disclose that the fluoropolymer dispersion being produced without

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drying such a process is taught by Doyle. As set forth above, Doyle discloses that the preparation of the copolymerization of VDF and the fluorinated side chains can either be copolymerized together first and then hydrolyzed, or hydrolyzed first and then copolymerized (Column 4, Lines 1-8). The hydrolysis process disclosed by the reference is contacting the sulfonyl fluoride containing monomer or polymer with a mixture of alkali metal carbonate and methanol (Column 4, Lines 9-19 and Column 5, Lines 9-19). Additionally, the reference discloses that the sulfonyl fluoride copolymer resin can be hydrolyzed by suspension in a hydrolyzing medium (Column 4, Lines 64-66).

Further it is noted in response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

11. Applicants arguments with respect to the 35 U.S.C. 102(b) rejection of the present claims over Grot have been considered but they are moot given that the reference is no longer applied against the present claims under 35 U.S.C. 102(b). It is noted however that Grot is utilized as a teaching reference. while reference does not disclose all the features of the present claimed invention, the reference is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely amounts of water and alcohol in aqueous fluoropolymer dispersions, and in combination with the primary reference,

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discloses the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there would be no need for secondary references.

12. Applicants cite the *Polymer* article by Gebel but do not state why the reference is being referred to. If Applicants are attempting to show that the presently claimed process w/o drying is critical, it is significant to note that Doyle discloses a process in which the fluoropolymer may be hydrolyzed by several methods including hydrolysis of the particles in a suspension, i.e. without drying. Further given that Gebel is drawn to a highly swollen membrane, it is not clear how this is applicable to the prior art of record.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER C. KOLLIAS whose telephone number is (571)-270-3869. The examiner can normally be reached on Monday-Friday, 8:00 AM -5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C. K./
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796